

(1)

1/1 - (C) FILE CA

AN - 115:18634 CA

ED - Entered STN: 12 Jul 1991

TI - Excimer laser patterning associated with silylation and oxygen reactive ion etching

IN - Fukui, Akiyoshi; Tokui, Akira

PA - Mitsubishi Electric Corp., Japan

SO - Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT - Patent

LA - Japanese

IC - ICM G03F007/038

ICS G03F007/36;G03F7/38;H01L21/027

ICA - H01L021-22; H01L021-266

CC - 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 76

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PN	JP3006566	A	19910114	JP 1989-141765	19890602
PR	JP 1989-141765		19890602		
AB	In patterning of resist for manuf. of semiconductor device, a novolak formed on a substrate is selectively irradiated by excimer laser beam silylated and dry-developed by O plasma reactive ion etching. Thus, a semiconductor substrate was spin-coated with a novolak film, selective irradiated by KrF excimer laser, treated by hexamethyldisilazane in vacuo at high temp., and dry-etched by O plasma to give a precise pattern having a rectangular section.				
ST	patterning resist excimer laser silylation; novolak methylsilylamine silylation dry etching; oxygen plasma novolak resist etching; semiconductor device patterning excimer laser				
IT	Semiconductor devices (patterning of resist for, excimer laser irradiation and silylation and oxygen plasma reactive ion etching in)				
IT	Phenolic resins, uses and miscellaneous RL: USES (Uses) (novolak, excimer laser resists from, patterning of, silylation and oxygen plasma reactive ion etching in, for semiconductor device)				
IT	Resists (photo-, patterning of, excimer laser irradiation and silylation and oxygen plasma reactive ion etching in)				
IT	999-97-3, Hexamethyldisilazane 34478-34-7, Trimethylsilyldiamine RL: USES (Uses) (photoresist modified by, for patterning of semiconductor device by excimer laser irradiation and oxygen plasma reactive ion etching)				